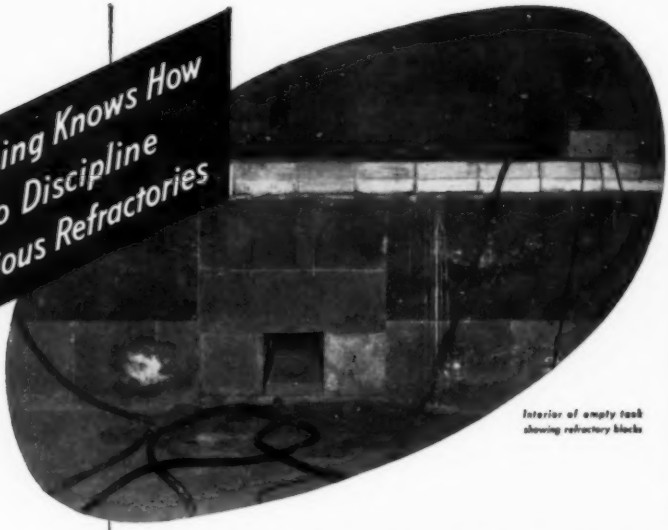
THE Chemist

FEBRUARY, 1946 VOLUME XXIII, No. 2

Corning Knows How To Discipline Fractious Refractories



Interior of empty tank showing refractory blocks

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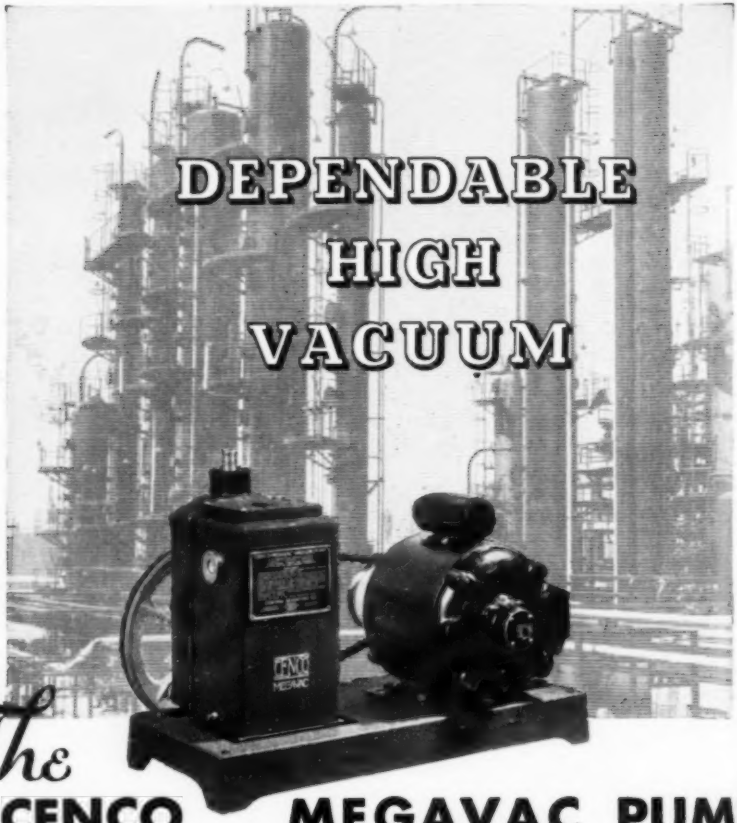

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The Chemist

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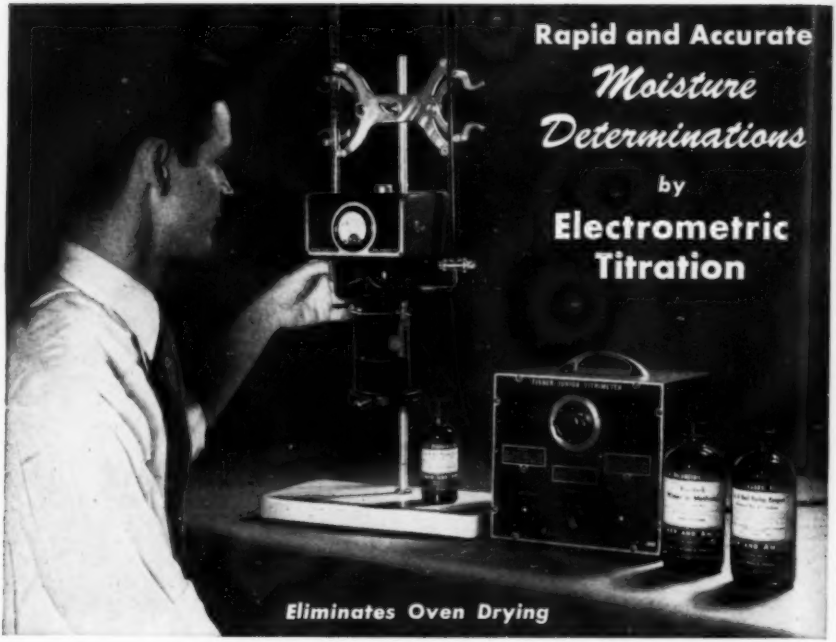

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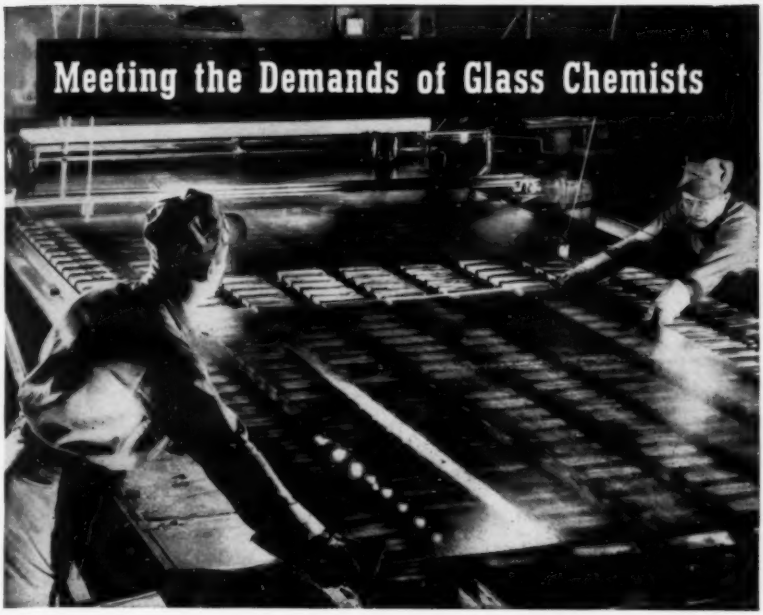

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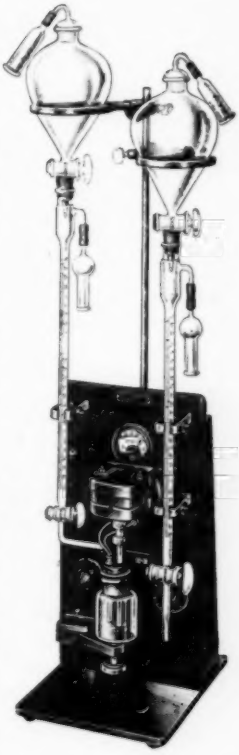

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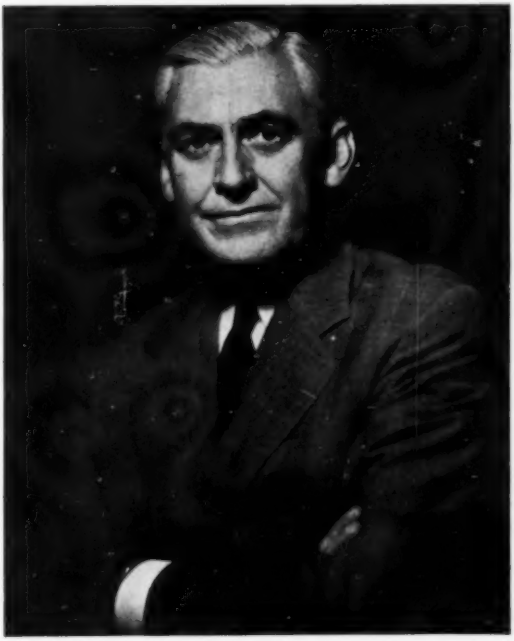
Robert Price Russell Awarded A. I. C. Gold Medal



ROBERT Price Russell, head of the central technical and research organization of Standard Oil Company (N. J.), has been awarded the 1946 gold medal of THE AMERICAN INSTITUTE OF CHEMISTS. The medal is awarded annually "for noteworthy and outstanding service to the science of chemistry or the profession of chemist in America."

In a letter to Mr. Russell, Dr. Gustav Egloff, president of the INSTITUTE, stated: "The unanimous decision of the committee to bestow this honor upon you was made in recognition of your genius not alone as a chemist and chemical engineer but as an administrator. Your deep interest in the chemist and the chemical engineer and their profession is outstanding. Your contributions to the petroleum industry and the war

effort are well and widely recognized."

Mr. Russell, president of Standard Oil Development Company, heads a petroleum research organization that has made major contributions to the development of new processes and petroleum products. The development of the fluid catalytic cracking process, under Mr. Russell's leadership, made possible enormous increases in the output of 100-octane aviation gasoline. Another project was the development of a process for synthesizing toluene from petroleum, making it possible to turn out unlimited quantities of toluene for TNT. A third process was responsible for the production of about ninety per cent of the petroleum butadiene made in this country for synthetic rubber.

During the war Mr. Russel supervised groups in the Standard Oil Development laboratories which worked on improved weapons for the armed services in close collaboration with the Army, Navy, Chemical Warfare Service, and the National Defense Research Committee.

Mr. Russell was born in Worcester, Mass., in 1898, the son of a bank clerk. He attended Clark University and helped to pay for his education with an assortment of jobs that included house-to-house selling of brushes. He served with the Marines in World War I, and then resumed study at Massachusetts Institute of Technology. After receiving the M.S. degree in 1923, he continued as assistant professor of chemical engineering and assistant director of the research laboratory. He joined the Jersey Standard Company in 1927, and became president of the Development company in 1944.

Presentation of the medal will be made at the Annual Meeting of THE AMERICAN INSTITUTE OF CHEMISTS in May.

Members of THE AMERICAN INSTITUTE OF CHEMISTS who attend the Exposition of Chemical Industries to be held at Grand Central Palace, New York, N. Y., February 25th to March 2nd, are cordially invited to register at the Institute's booth, No 2E on the second floor. Come in and meet your friends and the staff.

Ooms to Address TAPPI

Commissioner of Patents, Casper W. Ooms, will address the annual meeting of the Technical Association of the Pulp and Paper Industry, to be held on the morning of Monday, February 25th, at the Hotel Commodore, New York, N. Y. He will be introduced by C. W. Rivise, F.A.I.C. Members of The American Institute of Chemists are welcome to attend this meeting.

Proposed Chemists' Registration Act of Ohio

THIS registration act is the second draft of a bill proposed by the Ohio Chemists' Committee on Professional Practice (Ohio C_2P_2). The Committee was organized by a group of chemists in Ohio who are mutually interested in promoting the welfare of the chemist, the chemical profession, and the chemical industry, which provides their livelihood.

Each member of the Committee is a member of the American Chemical Society, each is employed in a supervisory or managerial capacity, and each recognizes his obligation to the profession. Some hold membership in THE AMERICAN INSTITUTE OF CHEMISTS, the Chemistry Section of the Ohio Academy of Science, Alpha Chi Sigma, and other professional and technical organizations. They are united by a desire to serve to the best of their ability in promoting the objectives of the Committee. These are

(a) To promote and develop public recognition of chemists as professional men;

(b) To establish and promote the recognition and acceptance of a Code of Ethics for chemists in the State of Ohio;

(c) To encourage interest and participation by chemists in civic, educational, and public affairs in the State of Ohio; and

(d) To encourage cooperation among societies in the State of Ohio, the membership of which is predominantly made up of chemists and chemical engineers in such matters as may be of mutual interest and advantage.

The activities of the Committee are local in character and limited to the State of Ohio.

As a first and necessary step in carrying out the objectives set forth above, a proposed Chemists' Registration Act of Ohio has been prepared by the Legislative Subcommittee of the Ohio C_2P_2. This proposed act is patterned after the highly successful Engineers and Surveyors Registration Act of Ohio (Section 1083-1 to 26, General Code of Ohio). Comments and criticisms are desired and should be addressed to E. L. Luaces, F.A.I.C., Chairman, Legislative Subcommittee, Post Office Box 377, Dayton 1, Ohio.

A BILL

To regulate the practice of professional chemistry; creating a state board of registration for professional chemists; defining its powers and duties; also imposing certain duties upon the state and political subdivisions thereof in connection with public work; and providing penalties.

Be it enacted by the General Assembly of the State of Ohio:

Sec. 1. That in order to safeguard life, health, and property, any person practicing or offering to practice the profession of chemistry, shall hereafter be required to submit evidence that he is qualified so to practice and shall be registered as hereinafter provided; and it shall be unlawful for any person to practice or to offer to practice the profession of chemistry, in this state, or to use in connection with his name or otherwise assume, use, or advertise any title or description tending to convey the impression that he is a professional chemist, unless such person has been duly registered or exempted under the provisions of this act.

Sec. 2. The term "professional chemist" as used in this act shall mean a person who, by reason of his knowledge of chemistry, mathematics, and other physical and natural sciences, acquired by professional education and practical experience, is qualified to engage in chemical practice as hereinafter defined.

The practice of professional chemistry within the meaning and intent of this act includes any professional service, such as consultation, investigation, evaluation, planning, development, or responsible supervision of operation, in connection with any public or privately owned public utilities, equipment, processes, works or projects, wherein the public welfare, or the safeguarding of life, public health or property is concerned or involved, when such professional service requires the application of chemical principles and data.

The term "chemist" as used in this act shall mean a person who engages in the practice of that branch of science commonly known as chemistry and as hereinafter defined.

The term "board" as used in this act shall mean the state board of registration for professional chemists provided for by this act.

Sec. 3. A state board of registration for professional chemists is hereby created whose duty it shall be to administer the provisions of this act. The board shall consist of five professional chemists, who shall be appointed by the governor, and who shall have the qualifications required by section 4. The members of the first board shall be appointed within thirty (30) days after this act becomes effective, to serve for the following terms: One member for one

year, one member for two years, one member for three years, one member for four years, and one member for five years, from the date of their appointment, or until their successors are duly appointed and qualified. Every member of the board shall receive a certificate of his appointment from the governor and before beginning his term of office shall file with the secretary of state his written oath or affirmation for the faithful discharge of his official duty. Each member of the board first appointed hereunder shall receive a certificate of registration under this act from said board. On the expiration of the term of any member, the governor shall in the manner hereinbefore provided appoint for a term of five years a registered professional chemist having the qualifications required by section 4, to take the place of the member whose term on said board is about to expire. Each member shall hold office until the expiration of the term for which such member is appointed or until a successor shall have been duly appointed and shall have qualified.

Sec. 4. Each member of the board shall be a citizen of the United States and a resident of this state, and shall have been engaged in the practice of the profession of chemistry for at least twelve years, and shall have been in responsible charge of important chemical work for at least five years. Responsible charge of chemical teaching shall be construed as responsible charge of important chemical work.

Sec. 5. Each member of the board shall receive the sum of ten ($10.00) dollars per diem when actually attending to the work of the board or of any of its committees and for the time spent in necessary travel; and in addition thereto, shall be reimbursed for all actual traveling, hotel and other expenses necessarily incurred in carrying out the provisions of this act.

Sec. 6. The governor may remove any member of the board for misconduct, incompetency, neglect of duty, or for any other sufficient cause. Vacancies in the membership of the board shall be filled for the unexpired term by appointment by the governor as provided in section 3.

Sec. 7. The board shall hold a meeting within thirty (30) days after its members are first appointed, and thereafter shall hold at least two regular meetings each year. Special meetings shall be held at such time as the by-laws of the board may provide. Notice of all meetings shall be given in such manner as the by-laws provide. The board shall elect or appoint annually from their members, the following officers: A chairman, a vice-chairman, and a secretary. A quorum of the board shall consist of not less than three members, and no action at any meeting shall be taken without at least three votes being in accord.

The secretary of the board shall keep a true and complete record of

all proceedings of the board and may employ such clerical assistance as the board may deem necessary.

Sec. 8. The board shall adopt all necessary rules, regulations and by-laws, not inconsistent with this act and the constitutions and laws of this state or of the United States, to govern its times and places of meetings for organization and reorganization, for the holding of examinations, for fixing the length of terms of its officers, and for governing all other matters requisite to the exercise of its power, the performance of its duties, and the transaction of its business under the provisions of this act. The board shall adopt and have an official seal.

In carrying into effect the provisions of this act, the board may, under the hand of its chairman and the seal of the board, subpoena witnesses and compel their attendance, and also require the production of books, papers, documents, etc., in a case involving the revocation of registration or practicing or offering to practice without registration. Any member of the board may administer oaths or affirmations to witnesses appearing before the board. If any person shall refuse to obey any subpoena so issued, or shall refuse to testify or produce any books, papers, or documents, the board may present its petition to any court of competent jurisdiction, setting forth the facts, and thereupon such court shall, in a proper case, issue its subpoena to such person, requiring his attendance before such court and there to testify or produce such books, papers, and documents, as may be deemed necessary and pertinent by the board. Any person failing or refusing to obey the subpoena or order of the said court may be proceeded against in the same manner as for refusal to obey any other subpoena or order of the court.

Sec. 9. The secretary of the board shall receive and account for all moneys derived under the provisions of this act, and shall pay the same monthly to the state treasurer, who shall keep such moneys in a separate fund to be known as the "professional chemists' fund." Such fund shall be kept separate and apart from all other moneys in the treasury, and shall be paid out only by warrant of the state auditor upon the state treasurer, upon itemized vouchers, approved by the chairman and attested by the secretary of the board. All moneys in the "professional chemists' fund" are hereby specifically appropriated for the use of the board. The secretary of the board shall give a surety bond to this state in such sum as the board may determine. The premimum on said bond shall be regarded as a proper and necessary expense of the board, and shall be paid out of the "professional chemists' fund." The secretary of the board shall receive such salary as the board shall determine in addition to the

compensation and expenses provided for in section 5. The board may employ such clerical or other assistants as are necessary for the proper performance of its work, and may make expenditures of this fund for any purpose which in the opinion of the board is reasonably necessary for the proper performance of its duties under this act. Under no circumstances shall the total amount of warrants issued by the state auditor in payment of the expenses and compensation provided for in this act exceed the amount of the examination, registration and renewal fees collected as herein provided. Said fund shall be continued from year to year and shall be drawn against only for the purposes of this act. It is further provided that when the said fund shall be in excess of ten thousand dollars on any calendar year the surplus shall be used toward the reduction of the thereafter renewal fees provided herein, until such fund shall fall below said sum of ten thousand dollars, when said fund, as herein established, shall be restored and maintained until said ten thousand dollar fund is once more attained.

Sec. 10. The board shall keep record of its proceedings and a register of all applications for registration, which register shall show (a) the name, age, and residence of each applicant; (b) the date of the application; (c) the place of business of such applicant; (d) his educational and other qualifications; (e) whether or not an examination was required; (f) whether the applicant was rejected; (g) whether a certificate of registration was granted; (h) the date of the action of the board; and (i) such other information as may be deemed necessary by the board.

The records of the board shall be prima facie evidence of the proceedings of the board set forth therein, and a transcript thereof, duly certified by the secretary of the board under seal, shall be admissable in evidence with the same force and effect as if the original were produced.

Annually, as of January first, the board shall submit to the governor a report of its transactions of the preceding year, and shall also transmit to him a complete statement of the receipts and expenditures of the board, attested by affidavits of its chairman and its secretary.

Sec. 11. A roster showing the names and places of business of all registered professional chemists shall be prepared by the secretary of the board during the month of January of each even numbered year.

Copies of this roster shall be mailed to each person so registered, placed on file with the secretary of state, and furnished to the clerks of court of all counties and the auditors of the principal cities of the state and to the public upon request.

Sec. 12. At any time within eighteen months after this act becomes

effective, upon due application therefor and the payment of the registration fee of fifteen dollars ($15.00) the board shall issue a certificate of registration, without oral or written examination, to any professional chemist, who shall submit evidence under oath satisfactory to the board that he is of good character, has been a resident of the state of Ohio for at least one year immediately preceding the date of his application, and was practicing professional chemistry at the time this act became effective, or has had previous practice and responsible charge of work of a character satisfactory to the board.

After this act shall have been in effect eighteen months, the board shall issue certificates of registration only as provided for in section 13 or section 21 there of.

Sec. 13. The following shall be considered as minimum evidence satisfactory to the board that the applicant is qualified for registration as a professional chemist to wit:

a. Graduation from an approved course in chemistry of four years or more in a school or college approved by the board as of satisfactory standing; a specific record of an additional four years or more of active practice in chemical work of a character satisfactory to the board, and indicating that the applicant is competent to be placed in responsible charge of such work; and successfully passing a written, or written and oral examinations; or

b. Successfully passing a written, or written and oral examination in chemistry prescribed by the board, and designed to show knowledge and skill approximating that attained through graduation from an approved four year chemical course; and a specific record of eight years or more of active practice in chemical work of a character satisfactory to the board and indicating that the applicant is competent to be placed in responsible charge of such work.

Chemical experience and training in any of the armed forces of the United States or civilian war services shall be credited as active practice in chemical work in connection with any application for registration as a professional chemist; provided, that such experience and training is of a character satisfactory to the board.

At any time within five years after this act becomes effective the board may accept as evidence in lieu of a prescribed examination, that the applicant is qualified for registration as a professional chemist a specific record of ten years or more of active practice in chemical work of a character satisfactory to the board and indicating that the applicant is qualified to carry out and supervise chemical work and has had responsible charge of important work for at least four years.

Every person applying subsequent

to the fifth calendar year following the effective date of this act, for a certificate of registration as a professional chemist shall be required to pass a written or written and oral examination prescribed by the board unless such person meets the requirements of section 21 hereof. In addition to passing the requisite examination he must submit evidence, satisfactory to the board, that he has completed the eight years of training and active practice or eight years of active practice required in section 13, subparagraphs (a) or (b).

Provided, that no person shall be eligible for registration as a professional chemist, who is not of good character and reputation.

In considering the qualifications of applicants, responsible charge of chemical teaching may be construed as responsible charge of chemical work. The satisfactory completion of each year of an approved course in chemistry in a school or college approved by the board as of satisfactory standing, without graduation, shall be considered as equivalent to a year of active practice. Graduation in a course other than chemistry from a college or university of recognized standing shall be considered as equivalent to two years of active practice; provided, however, that no applicant shall receive credit for more than four years of active practice because of educational qualifications. The mere execution of chemical work devised or planned by a professional chemist, or the carrying out of such work as a foreman or superintendent shall not be deemed to be active practice in chemical work; unless such work involves independent judgment in chemical practices, or the applicant presents evidence of additional chemical practice of a character satisfactory to the board and indicating that the applicant is competent to be placed in responsible charge of chemical work.

The board may permit the applicant for a certificate of registration as a professional chemist to take the prescribed examination in two stages. The first stage of the examination may be taken by the applicant at any time after he has completed four years of the required eight years of active practice or training and active practice.

This first stage of the examination shall test the applicant's knowledge of fundamental, technical subjects, including mathematics and the basic sciences. Satisfactory passage of this portion of the examination shall constitute a credit for the life of the applicant, or until he shall have been registered.

When the applicant has satisfactorily passed the first stage of the examination he shall be given an appropriate certificate by the board showing his status as a chemist in training.

The second stage of the examination shall cover the more advanced

professional training of chemists as amplified and matured by practical experience and shall test the applicant's ability to apply the principles of chemistry to the actual practice of his profession.

The applicant shall not be eligible to take the second stage of the examination until he has satisfactorily completed the required eight years of active practice or training and active practice. Nothing in this act shall be construed as requiring the applicant to take the examination in two separate stages. He may, at his option, take both stages of the examination at one time after he has completed the requisite eight years of active practice or training and active practice.

Any person having the necessary qualifications prescribed in this act to entitle him to registration shall be eligible for such registration though he may not be practicing his profession at the time of making his application.

Sec. 14. Applications for registration shall be on forms prescribed and furnished by the board, shall contain statements made under oath, showing the applicant's education and detail summary of his technical work and shall contain not less than five references, of whom three or more shall be chemists having personal knowledge of his chemical experience.

The registration fee shall be fifteen dollars ($15.00), five dollars ($5.00) of which shall accompany the application, the remaining ten dollars ($10.00) to be paid upon the issuance of the certificate.

Should the board deny the issuance of a certificate of registration to any applicant the initial fee deposited shall be retained as an application fee.

Sec. 15. When oral or written examinations are required, they shall be held at such time and place as the board shall determine. The scope of the examination and the methods of procedure shall be prescribed by the board with special reference to the applicant's ability to devise and supervise chemical methods and processes, which shall insure the safety of life, health, and property. A candidate failing in one examination may apply for re-examination within six months and will be re-examined at the next regularly scheduled examination without payment of additional fee. Subsequent examinations will be granted upon payment of a fee to be determined by the board, and which shall not exceed in amount the original fee. At least two (2) regularly scheduled examinations shall be held annually, in the months of January and July, respectively, and at such other times as determined by the board.

Sec. 16. The board shall issue a certificate of registration upon payment of registration fee as provided for in this act, to any applicant who, in the opinion of the board, has satisfactorily met all the requirements of this act. Certificates of registration

shall authorize the practice of "professional chemistry" and shall show the full name of the registrant, shall have a serial number, and shall be signed by the chairman and the secretary of the board under seal of the board.

The issuance of a certificate of registration by the board shall be evidence that the person named therein is entitled to all the rights and privileges of a registered professional chemist, while the said certificate remains unrevoked or unexpired.

Each registrant hereunder shall upon registration obtain a seal of the design authorized by the board, bearing the registrant's name and the legend, "registered professional chemist." Specifications, analyses, opinions, and reports issued by a registrant shall be stamped with the said seal when filed with public authorities, during the life of the registrant's certificate; but it shall be unlawful for anyone to stamp or seal any documents with said seal after the certificate of the registrant named thereon has expired or has been revoked, unless said certificate shall have been renewed or reissued.

Sec. 17. Certificates of registration shall expire on the last day of the month of December following their issuance or renewal and shall become invalid on that date unless renewed. It shall be the duty of the secretary of the board to notify every person registered under this act, of the date of the expiration of his certificate and the amount of the fee that shall be required for its renewal for one year; such notice shall be mailed at least one month in advance of the date of the expiration of said certificate. Renewal may be effected at any time during the month of December for a period of one or two years by the payment of a fee of not more than three ($3.00) dollars for any biennium, or as may be fixed by said board. The failure on the part of any registrant to renew his certificate upon expiration in the month of December when notified as required above, shall not deprive such person of the right of renewal, but the fee to be paid for the renewal of a certificate after the month of December shall be increased ten percent for each month or fraction of a month that payment of renewal is delayed; provided, however, that the maximum fee for delayed renewal shall not exceed twice the normal renewal fee, in any calendar year.

Sec. 18. A firm, or a co-partnership, or an association may engage in the practice of professional chemistry in this state, provided only such practice is carried on by professional chemists who are registered in this state.

Sec. 19. After the first day of January of the year following adoption of this act, it shall be unlawful for this state, or for any of its political subdivisions, for any county, city, vil-

lage, township, or school district to engage in the operation of any public work involving the practice of professional chemistry unless the carrying out thereof is supervised by a registered professional chemist; provided, that this section shall not apply to the design, construction, improvement or maintenance of any public work; and provided further, that nothing in this act shall be construed as excluding a professional engineer registered under the provisions of the Engineers and Surveyors Registration Act of Ohio, from such chemical practice as may be incident to the practice of professional engineering.

Sec. 20. The following persons shall be exempt from the provisions of this act, to wit:

(a) A person not a resident of and having no established place of business in this state, practicing or offering to practice herein the profession of chemistry, when such practice does not exceed in the aggregate more than sixty days in any calendar year; provided, such person is legally qualified by registration to practice the said profession in his own state, or country in which the requirements and qualifications for obtaining a certificate of registration are not lower than those specified in this act.

(b) A person not a resident of and having no established place of business in this state, or who has recently become a resident thereof, practicing or offering to practice herein for more than sixty days in any calendar year the profession of chemistry, if he shall have filed with the board an application for a certificate of registration and shall have paid the fee required by this act. Such exemption shall continue only for such time as the board requires for the consideration of the application for registration; provided, that such a person is legally qualified to practice said profession in his own state or country in which the requirements and qualifications for obtaining a certificate of registration are not lower than those specified in this act.

(c) An employee or a subordinate of a person holding a certificate of registration under this act, or an employee of a person exempted from registration by classes (a) and (b) of this section; provided, his practice does not include responsible charge or supervision.

(d) Officers and employees of the government of the United States while engaged within this state in the practice of the profession of chemistry for said government.

(e) All elective officers of the political subdivision of the state while in the practice of professional chemistry in the performance of their official duties, unless otherwise required by law.

(f) A chemist engaged solely as an officer of a privately owned public utility; or as an officer of a corporation engaged in interstate commerce as

defined in the act of congress entitled "an act to regulate commerce" approved February fourth, one thousand eight hundred and eighty-seven as amended.

(g) Nothing in this act shall be construed as requiring registration for the purpose of practicing professional chemistry by an individual, firm or corporation on property owned or leased by said individual, firm or corporation unless the same involves the public safety or public health; or for the performance of chemical work which relates solely to the fabrication of manufactured products, except where such products involve the public safety or public health in their use, transportation or sale.

Sec. 21. The board may, upon application therefor, and the payment of a fee of fifteen dollars ($15.00), issue a certificate of registration as a professional chemist to any person who holds a certificate of qualification or registration issued to him by proper authority of any state or territory or possession of the United States or any country, provided that the requirements for the registration of professional chemists under which said certificate of qualification or registration was issued do not conflict with the provisions of this act and are of a standard not lower than that specified in section 13 of this act.

Sec. 22. The board shall have the power to revoke the certificate of registration of any registrant who is found guilty of:

(a) The practice of any fraud or deceit in obtaining a certificate of registration;

(b) Any gross negligence, incompetency, or misconduct in the practice of professional chemistry as a registered professional chemist.

Any person may prefer charges of fraud, deceit, gross negligence, incompetency, or misconduct, against any registrant. Such charges shall be in writing, and shall be sworn to by the person making them and shall be filed with the secretary of the board.

All charges, unless dismissed by the board as unfounded or trivial, shall be heard by the board within three months after the date on which they shall have been preferred, and the hearing shall be in accordance with the provisions of the administrative procedure act.

The time and place for said hearing shall be fixed by the board, and a copy of the charges, together with a notice of the time and place of hearing, shall be personally served on or mailed to the last known address of such registrant at least thirty days before the date fixed for the hearing. At any hearing, the accused registrant shall have the right to appear personally and by counsel, to cross-examine witnesses appearing against him and to produce evidence and witnesses in his own defense.

If, after such hearing, three or

more members of the board vote in favor of finding the accused guilty, the board shall revoke the certificate of registration of such registered chemist.

The board, for reasons it may deem sufficient, may reissue a certificate of registration to any person whose certificate has been revoked, providing three or more members of the board vote in favor of such re-issuance. A new certificate of registration, to replace any certificate revoked, lost, destroyed or mutilated, may be issued, subject to the rules of the board, and a charge of two dollars ($2.00) shall be made for such issuance.

Sec. 23. Any person who shall practice, or offer to practice the profession of chemistry in this state without being registered or exempted in accordance with the provisions of this act, or any person presenting or attempting to use as his own the certificate of registration or the seal of another, or any person who shall give any false or forged evidence of any kind to the board or to any member thereof in obtaining a certificate of registration, or any person who shall falsely impersonate any other registrant of like or different name, or any person who shall attempt to use an expired or revoked certificate of registration, or any person who shall violate any of the provisions of this act, shall be guilty of a misdemeanor,, and shall, upon conviction, be subject to pay a fine of not less than one hundred dollars ($100.00), nor more than five hundred dollars ($500.00).

It shall be the duty of all duly constituted officers of the law of this state, or any political subdivision thereof, to enforce the provisions of this act and to prosecute any persons violating same. The attorney general of the state or his designated assistant shall act as legal adviser of the board and render such legal assistance as may be necessary in carrying out the provisions of this act.

Sec. 24. This act shall not be construed to affect or prevent the practice of any other legally recognized profession, or as excluding persons registered as professional engineers under the provisions of the General Code of Ohio from the lawful practice of their profession.

Sec. 25. If any section or sections of this act shall be declared unconstitutional or invalid, this shall not invalidate any other sections of this act.

Sec. 26. All laws or parts of laws in conflict with the provisions of this act shall be, and the same are hereby repealed.

A. D. Caeser and C. W. Rivise, F.A.I.C., of Caesar and Rivise, Philadelphia, are scheduled to give a course of ten lectures in chemical patent law as one of the continuation courses to be given by the Philadelphia Section of the American Chemical Society. The lectures start February fifth.

The Study of Scientific Russian

J. G. Toplin, F.A.I.C.

The importance to American scientists of closely following the published Russian researches in their fields is gaining general recognition in this country. The American Association of Teachers of Slavonic and East European Languages discussed this at its national meeting in Chicago, December 27-29, 1945.

A preliminary inquiry has shown that practically everywhere in the eighty-one American Institutions of higher learning where Russian was taught in the school year 1944-1945 (A. P. Coleman, *The American Slavic and East European Review* **IV**, No. 8-9, 185-208, 1945) scientists or students of science were enrolled in Russian classes. Furthermore, a number of industrial organizations in this country now have classes in Russian organized for their technical employees.

Of the institutions covered by this inquiry, twenty-one now accept or recommend Russian in partial fulfillment of the language requirements for graduate degrees in science. In other universities, acceptance, although not decided upon, is probable.

About four hundred students were studying scientific Russian in the 1944-1945 school year in these universities. The figures for the current year are too incomplete for comparison. Chemists studied Russian in larger numbers than did other scientists. Biologists, including physicians and medical students, came next, and were followed by physicists, including radio engineers.

Organization of courses in Russian for scientists, wider acceptance by American universities of Russian for graduate degrees in science, and procurement of Russian technical books and magazines are urged by the Committee on Teaching Scientific Russian, and the American Association of Teachers of Slavonic and East European Languages (AATSEEL).

Plastics Expansion

W. S. Landes, president of the Plastics Materials Manufacturers Association, recently announced that more than $107,000,000 will be spent by twenty-two manufacturers in the next eighteen months on new facilities for the production of plastic materials. He reported the labor supply as critical in certain Eastern areas, including New England.

Principles of the Bush Report Supported

The Council of The American Institute of Chemists voted at its latest meeting to support the principles of the Bush report as exemplified in the original Bill (S-1285) introduced by Senator Warren G. Magnuson of Washington. The Miami Valley and Chicago Chapters of the Institute have also passed resolutions in favor of the principles of the Bush report. The American Institute of Chemical Engineers, at a meeting held December 18th, approved science legislation of "the type fostered by the Magnuson bill."

Dr. Gustav Egloff, president, A.I.C., stated that the Magnuson bill would leave patents to be disposed of by individual negotiations and not give the government exclusive rights to any patents developed by wholly or partially sponsored government research. "One-man control" is also avoided in the original Magnuson bill.

Padlon With Allen A. Dicke

Joseph F. Padlon, F.A.I.C., formerly Colonel, Chemical Warfare Service, is now associated with Allen A. Dicke, patent attorney, 120 Broadway, New York 5, N.Y.

Nobel Prize Winners

The 1945 Nobel prize in physics has been awarded to Professor Wolfgang Pauli, of the Institute of Advanced Studies at Princeton, New Jersey, for his work on the "exclusion principle" which concerns the regulation of electrons in the outer shell of atoms and molecules. The Vienna-born expert on atomic research discovered the exclusion principle in 1925. In 1940 he came to the United States, where he has taken out his first papers for naturalization.

The 1944 Nobel award in chemistry has been made to Professor Otto Hahn, German authority on radio-activity and the atom. Specifically, the award cited the discovery of a method of breaking the heavy atom nucleus. Credited to him is the discovery of radiothor, mesothorium, and protactinium.

The 1945 Nobel award in chemistry was made to Artturi Wirtanen, Finnish biochemist, for his discoveries relating to agricultural and food chemistry.

The presentation of these Nobel prizes was made on December tenth in Stockholm, Sweden.

Bradley With Boston Varnish

John J. Bradley, F.A.I.C., formerly director in charge of research of Reichhold Chemicals, Inc., Boston, Mass., is now technical director of the Boston Varnish Company.

Resolution of the New York Professional Chapter of the Alpha Chi Sigma Fraternity

Reprinted from The Hexagon, September 1945

The New York Professional Chapter of the Alpha Chi Sigma Fraternity, recognizing

1) that chemistry is of increasing importance throughout American industry;
2) that the very existence of many important sections of industry has been made possible by chemistry;
3) that without the work of chemists the record of manufacturing achievement during the war could not have been attained;
4) that the successful stabilization of our economic system at a high level of production and employment after the war must depend to a large extent on the development through chemical research of new processes and new products;
5) that the "chemistry" which has in the past and will continue in the future to bring about those benefits to society is not an abstract term; it is the sum total of the work of individual chemists;
6) that no legal or generally recognized standards, comparable to those which govern most other professions, have been set up for chemistry;
7) that, partly as a result of the lack of generally recognized standards which define a chemist, the term is frequently misapplied to persons who have had little or no training in the profession of chemistry;
8) that in the absence of clearly defined standards there is in fact no profession of chemistry in the sense that there is a profession of engineering, of law, or of medicine;
9) that, partly because of this situation, a large proportion of chemists receive salaries which are neither commensurate with the long training which real chemists must have, nor with the indispensable nature of their work; and
10) for real economic advancement the chemist must, in most cases, largely forsake his profession and undertake duties of an executive nature,

recommends

1) any and all measures which will tend to strengthen, define, and establish chemistry as a recognized profession;
2) legal systems for the licensing of chemists, comparable to those which exist for other professions;
3) the issuance of diplomas, certifying proficiency in chemistry or chemical engineering, to gradu-

ate chemists or chemical engineers who successfully pass an examination given by a committee, comparable to the National Board of Medical Examiners;

4) also the issuance of diplomas, certifying proficiency in one of the several branches of chemistry, to candidates who successfully pass an examination given by a committee of eminent chemists who are engaged in that branch of chemistry, under a procedure similar to that employed in the medical profession for certifying proficiency in the various medical specialties;

5) the creation of opportunities for chemists of exceptional ability to advance to high economic levels without the necessity of leaving the pursuit of their profession.—G.R.

The American Society for Testing Materials, Philadelphia, Penna., is holding its "Committee Week" in Pittsburgh, Penna., at the Hotel William Penn, during the week of February 25th.

Donald B. Keyes, F.A.I.C., formerly chief of the Chemical Industries Branch of O.P.R.D., War Production Board, is now vice president of Heyden Chemical Corporation, 393 Seventh Avenue, New York 1, N. Y.

Egloff to Survey China's Petroleum Industry

Gustav Egloff, President A.I.C., recently departed by air for China, where he will represent Universal Oil Products Company, Chicago, under an agreement between Universal and the National Resources Commission of China concerning the development of a modern petroleum refining industry for that country.

With W. B. Shanley of Universal, Dr. Egloff will make a preliminary study of refineries now in operation there, make recommendations for improvements, and the establishment of new refineries, and estimate facilities for present and future needs.

In 1939, the National Resources Commission of China discovered crude oil in the Yumen field on the Shihyouho River in Kansu Province, North China, and this field is now in operation on a small scale. Other areas show promise of additional important oil deposits.

Movies on Cellulose Available

Hercules' Cellulose Products Department, Wilmington, Delaware, announces that its new industrial film, "Careers for Cellulose", is available without cost for exhibition purposes. Currently the film is now being translated into Spanish and Portuguese for showing in twenty Latin American countries by the Office of Coordinator of Inter-American Affairs.

Notes on the Chinese Tung Oil Situation

Maximilian Toch, Hon. A.I.C.

Last Spring I received a visit from my former Chinese assistant, Dr. Tien-Gi Ling, who is now General Manager of China Chemical Industries, Ltd., 608 Lin Sen Road, Chungking, China.

Dr. Ling stayed in New York several weeks and told me about the post-war possibilities in China. He informed me that the Chinese government had collected and had on hand many hundred tons of Kiri nuts (the name of the seed of the tung oil tree), and Dr. Ling was here in America looking for the best expellers and filter presses for the Chinese government.

In addition to that, they had thousands of fifty-gallon drums of China wood oil which would be exported as soon as bottoms became available.

China needs American dollars. In fact, all the countries of the world will endeavor to export whatever the United States can buy in order to have our currency, with which, of course, they intend to buy materials from us that they badly need.

This amount of China wood oil will probably be shipped to America at a reasonable price and from then on we can expect regular shipments every Spring.

Dr. Ling knows that, in America, we need a minimum of fifteen million pounds of China wood oil, but undoubtedly the Chinese government will probably have more than that for sale. There is also a good outlook for Perilla oil and Perilla seed which would help our shortage of linseed oil very materially.

China has been suffering for ages for want of roads. All of the China wood oil from the interior west of Hankow was carried in baskets to Hankow where it was dumped in big tanks, allowed to settle, and then shipped down the Yangtse River to Shanghai.

If there is one thing that the Japanese did for China during that so-called "incident" where they ran amuck and destroyed everything, it was to build roads for the transportation of their own war materials.

The Chinese roads are a type of macadam but strong enough to hold a five ton truck without disintegration.

Railroads are few and far between, but within a few years there will be ample roads and extension of railroads in China so that their products can reach seaboard without undue delay. When that time comes, China will make rapid progress and we will not suffer for want of their materials, many of which we so badly need.

COUNCIL

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President, Gustav Egloff
Vice-president, Donald Price
Secretary, Lloyd Van Doren
Treasurer, Frederick A. Hessel

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Harry L. Fisher	Harry B. McClure	W. D. Turner
Donald B. Keyes	Robert J. Moore	James R. Withrow
Raymond E. Kirk		John H. Yoe

CHAPTER REPRESENTATIVES

New York	*Niagara*	*Pennsylvania*
Elmore H. Northey	James Ogilvie	J. M. McIlvain
Washington	*Chicago*	*Miami Valley*
Walter J. Murphy	Martin DeSimo	E. L. Luaces
Baltimore	*Los Angeles*	*Louisiana*
Maurice Siegel	Albert Salathe	Harold A. Levy
Northern Ohio	*Western Pennsylvania*	*New Jersey*
M. J. Bahnsen	W. H. Hill	Horace E. Riley

December Meeting

The 224th meeting of the National Council of The American Institute of Chemists was held December 21st at The Chemists' Club, New York, with President Gustav Egloff presiding.

The following officers and councilors were present: Messrs. G. Egloff, H. L. Fisher, F. A. Hessel, R. E. Kirk, E. L. Luaces, J. M. McIlvain, R. J. Moore, E. H. Northey, N. A. Shepard, M. Toch, and Lloyd Van Doren. Mr. Arthur Schroder and Miss V. F. Kimball were present.

The minutes of the previous meeting were approved. The report of the Treasurer was accepted.

The Treasurer reported that the

necessary changes in the forms filed with the banks were being made, to indicate the INSTITUTE's change of Secretary.

Dr. Luaces suggested that the Constitution of the INSTITUTE be changed to incorporate as a requirement for membership, when the applicant lives or works in a state having a registration act for chemists, that the applicant be registered.

Mr. Schroder reported that representatives from the New York Municipal chemists had talked with him about the proposed classification of chemists by the New York Municipal Civil Service Commission.

It was decided that the INSTITUTE should recommend to the New York Municipal Civil Service Commission that the salary classifications should be similar to the Federal classification of chemists, and that the present salaries of the New York Municipal chemists are too low.

Dr. Egloff requested that copies of correspondence regarding the proposals to consider Federal Civil Service Classification and Promotion of Chemists be sent to all councilors and to the Committee on Economic Welfare.

Dr. Egloff discussed the Magnuson and Kilgore bills, and informed the Council that The American Institute of Chemical Engineers had voted in favor of the Magnuson Bill. The Chicago Chapter of THE AMERICAN INSTITUTE OF CHEMISTS also passed a resolution on November 30th in favor of the principles contained in the Magnuson Bill (S-1285).

Dr. Luaces reported that the Miami Valley Chapter of the INSTITUTE had also voted unanimously to support the principles of the Bush report.

Upon motion made, seconded, and carried, it was voted that the Council of THE AMERICAN INSTITUTE OF CHEMISTS communicate to the proper authorities its general support of the Bush report as exemplified in the original Magnuson Bill.

The President appointed Drs. Fisher and Shepard to serve as a committee to get a Chapter of the INSTITUTE started in Connecticut.

Dr. Luaces suggested that the INSTITUTE adopt a system of regional representation in electing officers. He gave as an example the election of a chairman, first vice chairman, and second vice chairman to the governing board of the Miami Valley Chapter. Each of these chairmen represents different areas in the Miami Valley Chapter, and they are positioned on the board according to the number of votes received.

Dr. Luaces reported that the Miami Valley Chapter would award student medals to colleges in the vicinity, and that there would also be a Miami Valley Chapter award of merit to someone in Ohio. The Miami Valley Chapter has voted as a matter of policy not to hold technical

meetings, but to hold meetings only on professional subjects.

In connection with the Miami Valley Chapter's plan to work closely with other scientific societies, Dr. Luaces reported the work of the C_2P_2 in that area, and the work which the Miami Valley Chapter is doing to promote a registration act for chemists in Ohio.

CHAPTERS

New Jersey Chapter

Chairman, H. E. Riley *Vice Chairman,* Paul Allen, Jr.

Secretary, Harry Burrell
Heyden Chemical Corporation
Garfield, New Jersey

Treasurer, J. B. Rust

Council Representative, H. E. Riley

Niagara

Chairman, Raymond G. Brown *Vice-chairman,* Wilmer H. Koch

Secretary-treasurer, F. L. Sievenpiper
National Aniline Division
Allied Chemical and Dye Corporation
Buffalo, New York

Council Representative, James Ogilvie

Reporter to THE CHEMIST, M. R. Bhagwat

The Niagara Chapter welcomed one of its former members, Dr. Lawrence H. Flett, as the principal speaker at its meeting held at Park Lane Hotel, Buffalo, December fourth. The subject of his address was: "Problems in Efficiency of Chemical Research."

The purpose of industrial research is to develop products which will be sold at a profit. Hence, in taking up problems for investigation, half of the research is knowing what is wanted. A comprehensive market research should give conclusive evidence as to what is wanted and how sustained the sales outlets, which might develop, may be expected to be. Therefore, the selection and training of personnel for technical service to secure accurate and reliable data is of utmost importance. Evaluation of all available information in the desired field will no doubt avoid misapplication of chemists' work. Further precautions in market development will eventually improve the efficiency of research.

Dr. Flett convincingly proved his points by examples of successful research in chemical, automotive, and other industries.

Among chemists of the Niagara area, Dr. Flett is better known as

"Mike," and his presence is always associated with cordiality and good fellowship. Among the guests at the meeting were John LesVeaux, Wesley Minnis, Raymond Ridgway and family. Chairman Ray Brown, who has known Mike since his college days, fittingly introduced him as a friend of chemists and a leader among men.

Patent Problems

Some of the most pressing problems which will confront this country's patent system in 1946, according to R. J. Dearborn, of the National Association of Manufacturers, will be: The report of the Patent Survey Committee appointed by President Truman to advise Secretary Wallace in making recommendations for patent reforms (see The Chemist, November, 1945); proposals for some form of compulsory licensing of patents; the role of the Government in research, especially in connection with the proposed formation of the National Research Foundation and Atomic Energy Commission for control of research in atomic energy; and modernization of the trade-mark laws.

Stanley Awarded Nichols Medal

The New York Section of the American Chemical Society has awarded the William H. Nichols Medal for 1945, to Dr. Wendell M. Stanley, biochemist of the Rockefeller Institute for Medical Research, at Princeton, N. J. for his discoveries in the chemistry of viruses. The medal will be presented in March.

Ross Retires

William H. Ross retired on December thirty-first as senior chemist of the Division of Soil and Fertilizer Investigations, Bureau of Plant Industry, Beltsville, Maryland, after thirty-three years of service. Previous to his retirement, Mr. Ross was for eighteen years, a Fellow of The American Institute of Chemists.

Frank E. Hale Retires

Frank E. Hale, F.A.I.C., director of laboratories, Bureau of Water Supply, Department of Water Supply, Gas and Electricity, New York, N. Y., retired on October 31st. Dr. Hale has been with the Department since 1903. Dr. and Mrs. Hale are spending the winter at Southern Pines, North Carolina.

Wendt Now Editor of New Science Magazine

Gerald Wendt, F.A.I.C., formerly with TIME, Inc., in now Editor of SCIENCE ILLUSTRATED, new monthly magazine, at 330 West 42nd Street, New York 18, N. Y.

The American Oil Chemists' Society will hold its 37th annual meeting at the Roosevelt Hotel, New Orleans, Louisiana, May 15-17, 1946.

For Your Library

GAS ANALYSIS AND TESTING OF GASEOUS MATERIALS. By V. J. Altieri, F.A.I.C., American Gas Association. First Edition. 569 pp. 6" x 9". $5.00 to members. $7.50 to non-members.

This is the second volume in the series of revisions of the *Gas Chemists' Handbook* (first volume: *Gas Chemists' Book of Standards for Light Oils and Light Oil Products*) to appear over Mr. Altieri's signature. He has spent years in the gas industry and at present is chief chemist for the Eastern Gas and Fuel Associates of Boston, Mass. He has drawn abundantly on his own experiences, as well as on those of his many friends in the industry, to make this an outstanding work.

The book is a comprehensive compilation of standard methods for the sampling and testing of gases and gas mixtures containing liquid and solid dispersoids, including gaseous materials required by the war. It correlates widely scattered technical information with the personal experience of contemporary experts in the gas industry, and brings Dennis' *Gas Analysis* and the *Gas Chemists' Handbook* up to the minute. About three-quarters of the book treats of new subject matter.

The laboratory gas-analyzing technician will find the control methods concise yet sufficiently detailed for him to follow. The chemist, physicist, and engineer will welcome the treatment of the theory underlying gas analysis; the interpretation of results obtained through the methods advocated; the 197-item bibliography and the fifty-eight time-saving tables of data. The executive will also find hints on safety and accident prevention.—A. S.

Intelligence Subcommittee Reports Available

The first index of the industrial and scientific technical reports of the Combined Intelligence Objectives Subcommittee (C.I.O.S.) has been released by the Army and Navy. Copies of this twenty-one page index and of the subsequent indexes may be obtained from the Office of the Publications Board, Department of Commerce, Washington 25, D. C.

Many of the reports listed in this index are only an evaluation of plants investigated or of interviews with German scientists and contain little technical information on the processes involved.

Copies of the original reports may be examined in the Auditorium, main floor, Department of Commerce, Washington, D. C., and may be obtained, at prices shown in the index, from the Office of the Publications Board.

Textile Team Report on Germany

The first preliminary twelve-page report of the textile team sent to Germany by the office of the Quartermaster General under the auspices of the Combined Intelligence Objectives Subcommittee has been released under No. OPA-11. This contains the following papers on the chemical and mechanical phases of the German textile industry:

Organization and research in Germany, J. P. Meierhans.

The Zellwolle Lehrspinnerei at Denkendorf, Dr. Earl Heard.

German Methods for Utilizing Unretted Flax and Hemp as a Textile Fiber, John F. Hagen.

Woolen and Worsted Industries in Germany, Werner von Bergen.

An Investigation of the Textile Dyeing and Printing Industry in Germany, Frank S. Richardson.

German Manufacture of Continuous and Staple Fibres and Related Products, Lloyd L. Leach.

In presenting these reports, the War Department is merely distributing technical information which has come into its hands from occupied German territory. This information should be made available to all United States citizens interested in it, but their use of it must be and will be at their own risk insofar as the United States or foreign patent violations are concerned.

Copies of these papers and of the final reports are released by the Office of Publications Board, Department of Commerce, Washington, D. C.

Russian Language Courses Offered

The University of Newark, Division of Special Education, 40 Rector Street, Newark 2, N. J., announces that evening courses for students of beginning and intermediate Russian are being given during the current semester.

The Acid Open Hearth Research Association, Inc., P. O. Box 1873, Pittsburgh, Penna., announces that its first research bulletin, "Acid Open Hearth Slag Fluidity and Its Significance," is now available at the price of $1.00 per copy.

Seminars on highpolymer chemistry are being held by the Polytechnic Institute of Brooklyn, New York, under the chairmanship of Raymond M. Fuoss, Sterling professor of chemistry at Yale University. They are held alternate Saturdays, and started November third.

From the *Congressional Daily*, Vol. VIII, No. 192: "Discovery of a new advantage in a process already in use does not provide ground for a patent, the Supreme Court ruled in General Electric Company vs. Jewel Incandescent Lamp Company."

Reprints Available

Reprints of "The Employed Chemist and His Employer," a report of the Committee on Employer-Employee Relationships of THE AMERICAN INSTITUTE OF CHEMISTS, are now available. This report was originally printed in the September and October, 1945, issues of THE CHEMIST. Copies of the reprint may be obtained at twenty cents each from THE CHEMIST. Special rates for ten or more copies will be quoted on request.

The Polytechnic Institute of Brooklyn, New York, is offering a graduate course in chemical engineering economy during the second semester of the academic year 1945-46.

Latin American Reports

The Inter-American Development Commission, 903 16th Street, N. W., Washington, D. C., announces the publication of six booklets on Latin American countries. These economic and industrial reports concern Argentina, Brazil, Chile, Mexico, Peru, and Venezuela. Readers of THE CHEMIST may obtain copies of these booklets upon request from the Commission, so far as the supply is available.

The Heyden Chemical Corporation, 393 Seventh Avenue, New York 1, N. Y., announces a new brochure entitled, "Illustrated Story of Penicillin Production." Readers of THE CHEMIST may receive a copy without charge on request to the company.

Service To

Institute Members

The columns of THE CHEMIST are available without charge to all members of THE AMERICAN INSTITUTE OF CHEMISTS who are either seeking chemists or looking for new positions.

Scientifically trained veterans who are seeking employment in industry, research, colleges and universities, are again reminded to register with the National Roster of Scientific and Specialized Personnel, 1006 U Street, N. W., Washington 25, D. C. If they are already registered, the Roster should be notified that they are available for employment.

Employers in need of additional scientific personnel are likewise requested to continue sending openings to the National Roster.

Chemists Available

RESEARCH AND DEVELOPMENT CHEMIST. A.A.I.C., Veteran Lt. (j.g.) U. S. Navy. Age thirty. Married. B.S. degree, Northwestern University. Graduate work, University of Delaware. Willing to work anywhere in U. S. Analytical, research and developmental work on pyrotechnics and explosives as well as many peace-time products. Desires research or developmental work with secure future. Salary secondary. Please reply to Box 24, THE CHEMIST.

Industrial Research and Development Chemist. Ph.D., F.A.I.C. Sigma Xi. Age 42. Publications, excellent references. 18 years chemist and group leader. Extensive academic research as student and research assistant in physical and physical-organic chemistry. Industrial experience in thermoplastic and thermosetting resins, photographic film base, adhesives, solvents, plasticizers, natural gas. $6500 per year desired. Interested in position involving practical and physical chemical approach. Eastern or Central location preferred. Available with a month's notice. All inquiries will be answered. Please reply to Box 20, THE CHEMIST.

RESEARCH DIRECTOR, Ph. D., F.A.I.C., seeking new position of first grade responsibility. Offers twenty years diversified experience in the fields of heavy and fine chemicals and specialties, comprising responsibility for all phases of research and development, including pilot plant to full scale production and sales-service. Wide knowledge of industrial needs. Successful completion of many projects in fields of detergents, textiles, metal processing, foods, solvents, surface active agents, inhibitors, germicides, soaps, cosmetics, etc. Energetic, engineering ability, initiative, proven organizer and leader. Location unimportant. Please reply to Box 26, THE CHEMIST.

TECHNICAL SALES REPRESENTATIVE. Veteran. P 38 Pilot. Married. B.S. in chemistry. Scholarship large Eastern University. Two years adhesive experience. Location immaterial. Technical sales or service preferred. Please reply to Box 22, THE CHEMIST.

CHEMICAL ENGINEERING GRADUATE (B.S. 1933, Washington U., St. Louis, Mo.) Age 33, married with one child. Ready to resume civilian career after 61 months of service as officer in the Army. Prior to Army service, owned and operated small cosmetics manufacturing plant in Kansas City, Mo., then in Dallas, Texas. Interested in returning to this or some similar field of industry. Location of secondary importance. Will accept position offering adequate opportunities for future, or willing to join in ownership and operation of independent enterprise. Please send replies to Lt. Col. Myron H. Blotcky, 6332 McGee, Kansas City Missouri.

Chemical Condensates

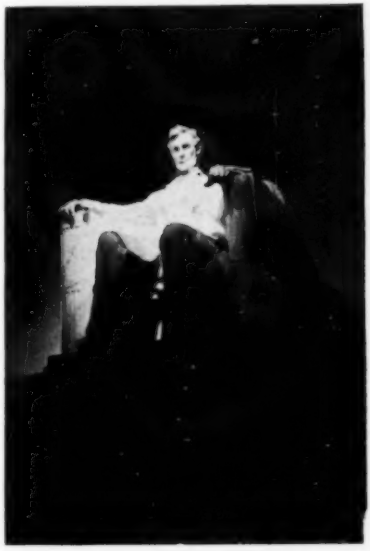
Ed. F. Degering, F. A. I. C.

Robert E. Wilson tells us that, "Our per capita consumption of oil is thirty times the average of the rest of the world. The energy content of this oil is equivalent to the work of forty slaves for every individual in the United States—and it is in such convenient and concentrated form that no number of slaves, or of horses, could do what it does for the average American."

The destiny of the scientist, according to Gustavus J. Esselen, F.A.I.C., is not to create but to unveil.

"Our scientists will have to do some straight thinking on this matter of acceptance by the public. There is no doubt but what scientists receive a considerable amount of publicity for their scientific achievements. However, the vast majority of them fail to take any interest in public, social, governmental and religious matters. Few ever give time to civil affairs. How can we publicize them other than for their scientific contributions until they do come out in a large way? Until they do, it will be very difficult to get the general public to recognize them as leaders of thought on any matters other than those of a strictly scientific nature."

—Walter J. Murphy, F.A.I.C.



—Photo by John J. Loughlin

"The patent system . . . secured to the inventor for a limited time exclusive use of his inventions, and thereby added the fuel of interest to the fire of genius in the discovery and production of new and useful things."

—Abraham Lincoln.

President Harry S. Truman said recently, "We have now won the battle of the laboratories as we have won the other battles." We tremble with wonder! Have we won or just initiated?

Meeting Dates

Feb. 5. Pennsylvania Chapter. THE AMERICAN INSTITUTE OF CHEMISTS. Engineers' Club. Philadelphia. Speaker: Commander Aubry H. Hamilton, USN, "Control of Tropical Diseases."

FEB. 8. Chicago Chapter, THE AMERICAN INSTITUTE OF CHEMISTS. Huyler's Restaurant, 310 South Michigan Avenue, Chicago. Dinner 6:15 p.m. Speaker: Dr. E. L. Luaces, F.A.I.C., president, Chemical Developments Corporation, Dayton, Ohio. Subject: "Some Fundamental Requirements for Licensing a Profession."

Mar. (date to be announced). Miami Valley Chapter. THE AMERICAN INSTITUTE OF CHEMISTS. Meeting in Cincinnati. Chapter Award. Speaker, Gustav Egloff.

Mar. 5. Pennsylvania Chapter. THE AMERICAN INSTITUTE OF CHEMISTS. Engineers' Club. Philadelphia. Speaker: Dr. Gerald P. Wendt, editor, *Science Illustrated,* "World Wide Chemistry."

MAR. 22. New York Chapter. THE AMERICAN INSTITUTE OF CHEMISTS. No. 2 Park Avenue. Dinner 6:30 followed by meeting.

Mar. 29. Chicago Chapter, THE AMERICAN INSTITUTE OF CHEMISTS. Huyler's Restaurant, 310 South Michigan Avenue, Chicago. Dinner 6 p.m. followed by meeting.

Apr. (date to be announced). Miami Valley Chapter. THE AMERICAN INSTITUTE OF CHEMISTS. Meeting in Columbus. Speaker, G. F. Deeble. "The Chemists' World".

Apr. 2. Pennsylvania Chapter. THE AMERICAN INSTITUTE OF CHEMISTS. Engineers' Club. Philadelphia. Speaker: Walter J. Murphy, editor, *Industrial and Engineering Chemistry*. "The Chemist as Demobilized from the Armed Forces."

MAY 3 New York Chapter. THE AMERICAN INSTITUTE OF CHEMISTS. No. 2 Park Avenue. Dinner 6:30 followed by meeting.

June (date to be announced). Miami Valley Chapter. THE AMERICAN INSITITUE OF CHEMISTS. Student Medals presented to outstanding chemistry students in area.

June 1. Chicago Chapter, THE AMERICAN INSTITUTE OF CHEMISTS. Huyler's Restaurant, 310 South Michigan Avenue, Chicago. Dinner 6 p.m. followed by meeting.

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